Wayne A. Rowcliffe

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Skills

- Designing and implementing solutions from high-level requirements.
- Working with a team to deliver software on schedule.
- Troubleshooting customer issues.
- Performance optimization.
- Concurrent / Distributed Programming.
- Software testing (Integration / Unit)
- Twelve years experience working with / administrating Linux systems.

Technical

- Primary Languages: Python · SQL (PostgreSQL) · C++ · SASS / CSS
- Libraries: Qt (Using PyQt) · Twisted (Python async IO library) · Boost · Protocol Buffers
- Version Control: Git with Pull Requests
- Development methods: Kanban · Agile (Sprints / Retrospectives) · Continuous Integration (Jenkins)

Work History

Priority 5 (2012–Present)
Software Engineer

- Client / Server application for geospatial event planning, triage, and response
- Critical Infrastructure simulation system

Triux LLC (2011–2012)
Android Developer

- Developed responsive, user-friendly apps for various clients.
- Designed UI and UX for Android applications.

Iowa State University (2010)
Research Assistant

- Created libraries to make design patterns concurrent.
- Wrote code to dynamically create Java bytecode at runtime.

Work Projects

- Built a system to relay updates from a REST server to a web app via Websockets.
- Designed and built a tool for finding hidden patterns in user data.
- Implemented a REST caching layer to improve query performance.
- Built a client library for pulling in ArcGIS feature data.
- Created various utilities for writing UIs more efficiently.
- Improved performance and scalability of simulation system.
- SQL query optimization (Better indexes / More computation in database)

School Projects

- Designed and Analyzed an implementation of Strassen's Algorithm on a mesh network. (2011)
- Approximated solutions to the Traveling Salesman Problem using Ant Colony Optimization. (2010)
- Developed a Client/Server-style multi-threaded Cellular Automaton simulator. (2010)
- Enabled the dynamic creation of Java bytecode for concurrent design patterns. (2010)
- Designed and Implemented a Client/Server-style multi-threaded BitTorrent Application. (2009–2010)

Education

Iowa State University Ames, IA, U.S.A. • Bachelor of Science: Software Engineering, 2011
Cumulative GPA: 3.98/4.00

Publications

Concurrency by modularity: design patterns, a case in point
Authors: Hridesh Rajan, Steven M. Kautz, Wayne Rowcliffe
Conference: OOPSLA, pp. 790–805, 2010

Honors and Awards

- Graduated Summa Cum Laude / Top 2% of the Engineering College
- Finalist in the National Merit Scholarship competition. Awarded an ISU Merit Scholarship.